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7/17/2002

PATENT  
Customer No. 22,852  
Attorney Docket No. 02481.1781

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Herbert MÄRKL et al.

Application No.: 10/088,412

Filed: March 20, 2002

For: METHOD FOR CULTIVATING  
CELLS, A MEMBRANE MODULE,  
UTILIZATION OF A MEMBRANE  
MODULE AND REACTION  
SYSTEM FOR CULTIVATION OF  
SAID CELLS

)  
)  
) Group Art Unit: Unknown

)  
) Examiner: Unknown

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Commissioner for Patents  
Washington, DC 20231

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. To the undersigned's knowledge, this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents, including any copending patent applications, are attached.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP  
1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

The relevance of European Patent 0 632 827 B1 is discussed on page 1 of the specification.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicants reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: July 2, 2002

By: *Elizabeth M. Burke*  
Elizabeth M. Burke  
Reg. No. 38,758

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



OMB No. 0651-0011

## INFORMATION DISCLOSURE CITATION

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|                  |                      |            |            |
|------------------|----------------------|------------|------------|
| Atty. Docket No. | 02481-1781           | Appln. No. | 10/088,412 |
| Applicant        | Herbert MÄRKL et al. |            |            |
| Filing Date      | March 20, 2002       | Group:     | Unknown    |

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## U.S. PATENT DOCUMENTS

| Examiner Initial* | Document Number | Issue Date | Name              | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|-------------------|-------|-----------|----------------------------|
|                   | 3,915,802       | 10/28/75   | Kominek           | 195   | 80        |                            |
|                   | 4,806,484       | 2/21/89    | Petrossian et al. | 435   | 311       |                            |
|                   |                 |            |                   |       |           |                            |
|                   |                 |            |                   |       |           |                            |
|                   |                 |            |                   |       |           |                            |

## FOREIGN PATENT DOCUMENTS

| Document Number | Publication Date | Country | Class | Sub Class | Translation Yes or No |
|-----------------|------------------|---------|-------|-----------|-----------------------|
| 0 632 827 B1    | 4/16/97          | EPO     |       |           | Claims only           |
| 0 371 783 A2    | 6/6/90           | EPO     |       |           |                       |
| WO 00/46354 A1  | 8/10/00          | PCT     |       |           |                       |
| WO 87/06610     | 11/5/87          | PCT     |       |           |                       |
| 3-172170        | 7/25/91          | Japan   |       |           | Abstract Only         |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|   |
|---|
| H. Märkl, et al., "Cultivation of <i>Escherichia coli</i> to High Cell Densities in a Dialysis Reactor*," Appl. Microbiol. Biotechnol (1993) 39:48-52.                              |
| M. Krahe et al., "Fermentation of Extremophilic Microorganisms," Federation of European Microbiological Societies, FEMS Microbiology Reviews 18 (1996) 271-285.                     |
| James Chukwuma Ogonna et al., "Nutrient-Split Feed Strategy for Dialysis Cultivation of <i>Escherichia Coli</i> ," Biotechnology and Bioengineering, Vol. 41, pp. 1092-1100 (1993). |
| R. Pörtner et al., "Dialysis Cultures," Appl. Microbiol. Biotechnol (1998) 50: 403-414.   |

|   |   |
|---|---|
| Examiner  | Date Considered   |
| *Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |
| Form PTO 1449   | Patent and Trademark Office - U.S. Department of Commerce |